

ABSTRACT

In a scanning exposure, the short stroke module accelerates the mask or substrate table with a higher acceleration than the long stroke module. The short stroke module starts at or near (proximate) one extreme of its range of motion and catches up to the long stroke module during the scan. The long stroke module starts to decelerate earlier but the short stroke decelerates faster so that the short stroke overtakes the long stroke and ends up at the other extreme of its range of motion. The acceleration times can be reduced without increasing the forces exerted by the long stroke actuators so there is less of an increase in dissipation and reaction forces.